DOCUMENT RESUME

ED 034 929 AC 006 186

AUTHOR	Bland, Laurel L.
TITLE	A Report and Basic Proposal to Provide Alaskan Manpower Entry into the Pipeline and Related Construction Skills via Technical Training, Immediate and Intermediate.
INSTITUTION	Alaska Univ., College.
PUB DATE	69
NOTE	30p.
EDRS PRICE	EDRS Price MF-$0.25 HC-$1.60
DESCRIPTORS	Adult Basic Education, American Indians, *Construction Industry, Educational Needs, Employment Programs, Eskimos, Ethnic Groups, *Manpower Development, *Program Proposals, *State Programs, Technical Occupations, *Vocational Retraining
IDENTIFIERS	*Alaska

ABSTRACT

To make policy makers and others more aware of possibilities for utilizing Alaskan manpower, information has been gathered on the manpower demand to construct the proposed 800 mile Alaska oil pipeline and its supporting system. The recruitment and training of chronically unemployed or underemployed workers (largely Eskimos and Indians) is being stressed. An eight week training program is planned in which a section of 48" pipeline is built and then dismantled under circumstances identical to the actual job. Objectives of the program are to train, under a cooperative and consolidated arrangement, workers acceptable to industry requirements in time to establish a firm hold on local hiring preferences; and to provide guidelines for future major programs and industry related vocational training. (Appendixes deal with union representation, personnel needs, the North Slope construction timetable, drilling crews, and program staffing. Educational needs and recommendations relative to adult basic education are also reported.) (ly)

Copy

ED034929

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

A

REPORT AND BASIC PROPOSAL

TO PROVIDE

ALASKAN MANPOWER ENTRY INTO THE PIPELINE AND RELATED CONSTRUCTION SKILLS

VIA TECHNICAL TRAINING--IMMEDIATE AND INTERMEDIATE

Prepared by

LAUREL L. BLAND
Research Assistant in Adult Education

University of Alaska at College, 99701

PRESENTED TO

20th ALASKA SCIENCE CONFERENCE "CHANGE IN THE NORTH"

at

College, Alaska 99701

August 24-27, 1969

AC 006 186

A REPORT AND BASIC PROPOSAL TO PROVIDE ALASKAN MANPOWER ENTRY INTO THE PIPELINE AND RELATED CONSTRUCTION SKILLS VIA TECHNICAL TRAINING--IMMEDIATE AND INTERMEDIATE

by

Laurel L. Bland

The purpose of this report is to consolidate information concerning the manpower demand to construct the Alaska oil pipeline and its supporting system; and to increase the awareness of policy makers, planners, and the interested public of the immediate and potential possibilities for utilization of Alaskan manpower--particularly that portion which is presently unemployed, underemployed, and jobless.

This report is limited technically in that it does not cite a large number of authorities or list a bibliography to substantiate its allegations. This was deemed unnecessary for two reasons. One, the persons who will make use of the information contained herein will be largely cognizant with the general situation, and thus will find sufficient evidence in the references mentioned to establish veracity of the contents. Secondly, much of the information was gathered from, and subsequently verified by others, who are directly connected with the planning and construction of pipeline systems and petroleum development. Confidentiality and courtesy require that such sources remain anonymous.

This report is further limited in that it does not pretend to present a working model for the training program which is implicitly recommended throughout the text. Programming, curriculum development, and budgeting, which are mechanical aspects of the proposal, are presently being developed in several areas including the Alaska Department of Education and the University of Alaska.

The growth and development of petroleum extraction in Alaska has much in common with single industry based economic development in the underdeveloped nations of the world. This analogy is particularly appropriate since expert opinion places the estimate of the present North Slope discovery at a conservative figure of 5 to 10 billions barrels of oil. Only 21 fields in the world have produced a billion barrels, so the discovery has worldwide economic and political implications.

The petroleum industry needs a dependable local workforce, constructive community relations, and an affirmative association with governmental and regulatory bodies. This applies equally at all levels, but remarks herein shall be directed in this context as it affects Alaska. The needs listed are necessary to efficiently develop a profitable long-range operation. The ideal labor situation may be difficult to achieve, but certain basic actions from the beginning of the intensive labor demand will do much to attain the optimum in a reasonable length of time. The best approach is to "gear up" for the anticipated intense labor demand by initiation of special orientation and minimum entry skill training for petroleum construction related jobs. Particularly, emphasis should be placed on those jobs which

must be filled by contractors and subcontractors of the oil companies.

It is commonly agreed that every effort must be made to place as many Alaskans as possible on the employment roles of the North Slope projects. The sooner Alaskans are a part of that force, proving their skill and productiveness, the faster the labor ranks will be opened up to include more. This proposal seeks to take first things first. It starts with those workers who are semi-skilled or skilled but are presently considered unemployable by the industry because they do not have the necessary specialized proficiences demanded. When these potential employees are cross-trained or upgraded to meet industrial standards, effort will then be concentrated upon the unemployed and jobless.

Alaska may have to accept some of the same distressing facts that Canada did when oil development took place in Alberta and British Columbia. Nevertheless, the state can profit by their experience and hasten entry of a part of the Alaskan workforce into petroleum related employment by planned direct action in training and orientation.

In 1947, when the Laduc reservoir was developed, less than 20% of Canada's workforce was included in the first 5 or 6 fields put into production. After some time the government and industry realized the need to provide skill training, and finally, by 1947, as a result of cooperative effort between industry and government, the employment percentages were reversed. Canadians now hold 80% of the oil development related jobs in Canada. Before this was accomplished a vast sum of money was lost to Canada's (and particularly Alberta's) gross product and a significant number of Canadians were without jobs in the industry.

It is reasonable and proper for public funds to cover the cost of industrial vocational training in Alaska. Generally speaking, the available and potential untrained or undertrained manpower is concentrated in the minority and disadvantaged segments of the population. Present national policy, applied through federal and state laws and regulations, provide the foundation for public funding for skills training. The mechanics of the present structure prohibit sufficient flexibility in government for response to such a sudden dramatic comprehensive need for training and deployment of trainees as is appropriate to the current situation in Alaska. The State's awareness and response, revenue released from petroleum and related activities in Alaska, and a demonstrated demand for manpower in a wide variety of occupations will eventually introduce an overall plan for existing training needs. Meanwhile, economic analysis of the manpower situation will indicate that it can prove to be a very good investment for government, industry, unions, and local civic leadership to pool resources in various combinations to anticipate the intensive labor demands for the next several years. Specialized training at minimum and low entry levels of a number of occupations can be cooperatively programed in such manner that these programs can be absorbed into public supported educational and training establishments as conditions evolve. Such an approach, designed to supply needed manpower at the basic operational level, will contribute substantially to an atmosphere of mutual effort to obtain immediate equitable solutions to a complex problem in Alaskan manpower.

The "Findings and Recommendations" of the recent Fairbanks Regional Job Development Conference, the Anchorage and Nome Job conferences held previously, and the subsequent conference held in Anchorage in April, 1969, have expressed concern for, and awareness of, a need for a special program to provide insight and guidance to supervisory personnel at all levels of Alaskan industrial and

government employment. Current law and regulation dealing with equal employment opportunity and affirmative action have obligated most employers related to petroleum extraction and production to be subject to federal control relative to hiring and employment practices. In many cases these employers are in accord with the philosophy behind the regulations, but action to place minority and disadvantaged employees in stable and progressive positions has failed. Alaska is considered by national Equal Employment Opportunity (EEO) specialists to have less obstacles to overcome in initiating EEO than most states. Apparently a major causal factor for this failure is judged to be misunderstanding and ignorance of the methods and techniques of industrial psychology as it applies in Alaskan operations.

Five years of intensive experience and field observations, combined with several years of university level research have led to several conclusions. The Alaskan Native seems to be viewed one of two ways by those who are active determinats of his future. Collectively, the Natives of Alaska are seen to be lazy, incompetent, and subject to excessive alcohol abuse; or they are seen as appealing parka-clad "Noble Savages" which must be protected and sheltered from the surrounding dominant society.

Eskimo, Aleut, and Alaskan Indian spokesmen, as well as employers at all levels disagree. They do agree that there are elements of truth in each view at each end of the yardstick, but they can, and do, cite considerable evidence to indicate that the truth exists primarily in the middle ground. Herein lies the potential, and the largest number, of Alaskan Native employables.*

Alaska Bureau of Indian Affiars (BIA) and the State labor and training records reveal that several thousand people of Native origin have been trained in a variety of needed skills. Widespread academic education to the minimum functional level has been available in rural Alaska for at least two generations (32 years). National emergencies have successfully placed several thousand Native people on jobs for the duration of an emergency. Since World War II, basic education and various kinds of skill training have continued to be absorbed by the adult Native population through the National Guard System. All of this investment in human skill development, no matter what the reason, means a manpower potential and resource of significant dimensions exists in rural Alaska, and is largely unrecognized. It is not being constructively utilized according to Alaska Workforce Summary Reports and recent competent research**

Planned intelligent use of industrial psychology, tailored to the Alaskan situation will do much to alleviate the situation and improve the personal income ratios. Competent planning and direction for development of Alaskan Industrial Psychology is avaihble at the University of Alaska.

* See reports of the job development conferences 1967, 1968, 1969, on file with the Alaska Office of the Governor.

** See appropriate reports of the Federal Field Committee for Development Planning in Alaska and others on file with the University of Alaska.

Office of Economic Opportunity (OEO) has indicated a strong interest in the development of special two-way industrial counseling project models at key locations in the United States. There is genuine interest in Alaska. These models will attempt to develop and eventually implement aspects of industrial psychology tailored to a special socio-economic enviornment. Both OEO and other knowledgeable specialists generally agree that the design and direction of such a program will best be served when approached as continuing education planning and programming at the university level. OEO has, in fact, indicated that they will have little interest except under such circumstances.*

Skills training planning at the international, national, or even state level (particularly when the state is as large as Alaska) has little meaning to individuals caught in the demands of operation and execution of field operations. Under these situations, utilization of manpower by the oil industry in Alaska becomes a major concern to Alaskans in all walks of life. Long range planning may or may not indicate this problem will solve itself in the process of "getting the job done." The ordinary individual cannot, and will not, accept this even if it proves correct in the final analysis. This assumption is based upon evidence that the majority of Alaskans appear to be well informed and aware that:

--Alaska's unemployment rate is at least double that of the nation, with large areas of the state maintaining over 60% and up to 90% consistent unemployment.

--More than 50,000 Alaskan Natives live in the State with an unemployment rate estimated as high as 90% of the available manpower in this group.

--There are no statistics upon which to base a reliable figure for the number of unemployed employables in the state. A study presently underway at the University of Alaska has made a preliminary finding of an estimated unrecorded employable unemployed Alaskan Natives numbering more than 10,000 (double the present record).

In order to be effective, any solution to the problem of manpower development and utilization, as related to the petroleum industry in Alaska, must lead to:

- A dependable local workforce that can withstand the necessary importation of workers from outside the state to supplement available resources which cannot fill the large demand;

- Public attitudes amenable to the demand for workers which petroleum industrial development and all it implies requires; and

--Planning, development, and project guidance regarding human resource utilization which involves competent local leadership which is not necessarily directly concerned with industry, government or labor policy execution.

The first areas of occupational specialty which need concentrated educational attention in order to produce individuals qualified to compete

*Based upon preliminary communication between the University of Alaska and OEO.

for employment in petroleum related jobs include but are not limited to:

--minimum entry positions on pipeline construction spread crews,

--clerical skills emphasizing expediting, warehousing, and time-keeping vocabulary and format,

--roustabout and roughneck entry-level orientation

--heavy equipment operation as related to specific field operation machinery

--dockhands and cargo handlers.

Investigation into the labor components of a typical pipeline spread (a minimum of 300 men) according to the Dictionary of Occupational Titles classifications indicates that about 20% of the spread workforce entering a developing area can include inexperienced local labor. Other investigation indicates that of the approximately 36 men on a drilling rig, only 17% (5 to 6 men) can be employed as inexperienced entry-level labor. Simple mathmatical computation, however, based upon known and anticipated labor requirements in the present and forthcoming development and construction in the petroleum industry, alone, is staggering when compared to the available and untapped manpower resources of the State of Alaska.

The construction of the first 48" Alaska oil pipeline is imminent, together with its auxillary construction of roads and airfields. Concurrent, or nearly so, with pipeline construction will be installation of the feeding and gathering system for the pipeline, construction of the Fairbanks topping plant, expanded docking facilities at several Alaskan ports. and immediately after the 1969 oil lease sale, new rigs can be expected to be spudded in as quickly as men and supplies can facilitate the job. This does not include speculation upon the probabilities of a gas line and the construction which will be required when sea tankage of oil becomes a reality. Meanwhile, the established business and trade of the State must go on and absorb the additional demands for goods and services which petroleum extraction and production will require.

The answer to the probable shortage of manpower, and what can be done that is acceptable and fair to the residents of Alaska, appears to lie in approaching the problem in a fashion that will be visably affective and holds a reasonable expectation for success.

One answer to gaining immediate entry for Alaskan labor into construction on the North Slope is to use a single industry oriented crash training program. This has been successfully accomplished in Canada for oil, and with other industries in California, New Mexico, and a number of other states. The aim of the proposal herein, is to get proficient Alaskan workers ready to report on the job the day construction of the pipeline begins. The project. as outlined, will act only as an interim short-term solution until a State plan is completed or a comprehensive skills center is in operation.

It is intended to serve a dual purpose:

--To produce workers acceptable to industry requirements in time to

establish a firm precent and a solid hold on local hiring preference.

--To serve secondarily as a pilot-demonstration project to provide insight and guidelines for future major programs and overall industry tied vocational training.

According to industry spokesmen, and based upon other similar situations, the initial phase (pipeline construction) of North Slope development can reasonably be expected to absorb only 20% of the Alaskan workforce. This can ONLY occur if the skilled and semi-skilled local manpower is available. This is about 750 workers in pipeline construction. Of this number, the project proposed can supply about 500 men in a six-month period. These workers must be trained by men of established reputation and reknown within their trade. The recommendation of the instructors, then, is such that it guarantees ready acceptance on a spread. Thus, negotiations for a guarantee of hire are reduced to little more than a formality.

The secondary value of the proposed project, as a pilot-demonstration model, can be viewed in several ways:

--It is put together so it can be adapted to any number of skills categories, industries, or areas of endeavor. (i.e. mining, fisheries, wood products, cottage industries, small business operation, transportation, etc.) It is short term, intensive, ends in immediate employment or use of new skills, and satisfies a moral and economic obligation to the public without being in conflict with other educational or training planning now being developed.

--It views recruitment of trainees in a progressive and successive manner which allows for:

--Labor's approval and participation by including them from the beginning, and by providing union members with specialized training which the locals cannot presently offer;

--Entry of trainees from any socio-economic strata or geographic area;

--A high rate of successful completion by being structured to guarantee subsequent immediate employment or use of skills;

--Entry of experienced workers and novices since aptitude and ability to comprehend and apply the training for use on the job are all that is required for eligibility;

--Replacement of instructors by former trainees thereby assuring continuity of the specialized training as needed; and

--Time for rural residents to learn of the program and its relationship and usefulness to them, and for active, direct recruitment in the remote areas.

--It provides skill training in work areas which have a forecast of stable demand in Alaska for at least 20 years.

--It requires the assignment of a qualified evaluator-observer/consultant to document the project in detail, and thus provide valuable information to State planners and programmers, as well as other appropriate organizations and individuals.

--Economic analysis of the proposal will indicate that it will ultimately be profitable to all the principal interests concerned because:

--The State will gain in manpower utilization, tax revenue, reduction in the general unemployment rate and attendant welfare expenditures, and "ground floor" entry of Alaskan workers into highly specialized skills of world-wide and continued demand;

--The unions will benefit by the additional proficiency and versatility of local membership;

--The industry will profit by acquiring a stable acclimated "core" workforce for their Alaskan operation much sooner than anticipated.

The structure of the program must be mobile, adaptable, and flexible. A reliable evaluation of the project will provide the basis for planning and implementing similar programs for other industries at on-site locations. Thus, training then becomes virtually at-the-job-site, and transfer of learned skills is immediate and efficient.

Very simply, the training program consists of constructing a section of 48" pipeline and then dismantling it under circumstances identical to doing the actual job. It is reasonable to anticipate that equipment and most supplies will be provided by consignment from the affected industry. The training will consist of a general orientation to the job--both as a whole and in its various aspects. Ideally, living conditions will be almost identical to those of a construction camp. Trainees will become acquainted with all the responsibilities and skills required on a spread. Orientation will also include a refresher course in the individual trainee's occupational skill. All trainees will be required to demonstrate understanding and proficiency in the following:

FIRST AID AND JOB SAFETY

ARCTIC SURVIVAL

Individual trainees will specialize by preference, previous occupattional skill, or skill training in the following areas:

WELDING

TRANSPORTATION

HEAVY EQUIPMENT OPERATION

SUPPORT LABOR (including demolitions)

Each training session will cover approximately two months, with 6 weeks of intensive job-tied training and 2 weeks allowed for general orientation.

Recruitment will include emphasis upon obtaining mature stable seasonal workers from the villages. These leaders will provide revolving leadership and maintain discipline based upon ethnic values and life styles. The training project, as such, will not enter into acculturation, but will be realisticly aware of transitional problems that may be encountered. Two-way industrial counseling will be part of the program. Personal affairs will be viewed as outside the realm of the project's administration, and such matters will be settled by the trainees themselves. Occasionally instructors will become involved in a crisis situation, but only as it would naturally occur on the job.

The project is result-directed, as stated in the purpose, and considers assistance in long-range cultural adjustment the provence of other programs.

Eligibility is based upon demonstrated aptitude or learner-level skill experience. Desire sufficient to motivate enrollees to complete the training period successfully and to subsequently enter training-related employment is the basic qualification. Areas of recruitment will include, but not be limited to:

BIA trainee rolls, PD&C applicants, and other pertinent lists
Native associations and organizations
Alaska State Employment Service
Union locals
Civic and private organizations concerned with EEO
Field recruitment provided through the program itself.

Follow up of trainees will be included.

Each training session will function much as a spread crew. It is not the intention, however, to seek to place an operational crew on the job as a "package." This,is not feasable.

The program outlined is based upon the premise that a large diameter pipeline is to be constructed in Alaska for a distance of approximately 800 miles. It will extend from the oil reservoir to tidewater. The following information has been compiled from petroleum and construction industry sources and verified by interviews with expert persons and a review of pertinent technical literature.

A pipeline is installed in joints, by sections. Each section is approximately 100 miles. Each section is manned by a spread. A spread is made up of 300 or more workment, skilled and semi-skilled in a highly specialized application of their trade. The Alaska pipeline construction is expected to require a minimum of 5 to 8 spreads. Spreads usually operate on a 10 to 12 hour day, although climate and sun-hours affect working times. A spread is made up of the following components:

1 Spread Boss
1 Straw Boss
12 Foremen to head up the following spread crews:

Right of Way Clear	Right of Way Grade
Pipe Stringing	Ditching
Bending	Pipe Tack
Welding	Coating
Lower-In	Backfill
Tie In	Testing
Clean Up	

Supervisors on each spread includ:

Spread Man (R/W Foreman)	Pipe Man
Top Ditch Man (Clean Up)	Dope Man
Tie-In Man	

Additional specialists include:

X-ray men (appx. 4 per spread)

Surveyors (5 per section before construction, 2 or 3 during construction)
Inspectors (usually oil company employees or agents)

Note: Workers without experience on big pipe spreads will need specialized training in their skill areas. Initially, for even these workers, little can be accomplished OJT, but short intensive work-techniques training periods can upgrade worker skill to meet entry level on a spread.

It is anticipated that approximately 17 pumping stations will be required for the pipeline. This requires a minimum of 4 crews of 250 to 300 workers.

Two terminal sites will be completed, and this will require 1000 to 1500 workers. Additional labor components for construction will include support personnel for transport of supplies and equipment, personal services, and maintenance of facilities. Support ratio is 3:1 per construction worker.

A certain amount of "fallout" of workers as different parts of the construction are completed can be anticipated. These workers can expect to be utilized in other aspects of the overall construction project.

According to current routing of the pipeline, the highest demand for labor will be the first two years, with an acceleration in demand each time a new phase of construction is begun--south section, central section, and the north section. conservative estimate for the total labor force to be deployed in pipeline construction runs from 5000 to 6000 workers. Peak employment is estimated as high as 10,000 individuals for construction and its support force. It is forecast that when the feeder and gathering system is under full scale construction, the manpower need will be double that of the peak requirement during pipeline construction.

This latter construction phase will begin sometime during pipeline construction and can be expected to peak and temporarily stablize in manpower demand within five years after initial pipeline construction is begun. Construction of feeding and gathering systems is limited only by the extent of producing wells developed. Lease sale reports will provide a guage for estimating manpower demands in this area. It commonly requires 6 to 10 miles of feeder pipe for every mile of big pipe into which it feeds. This is approximately 8000 miles of small pipe to support the first Alaska oil pipeline.

The feeder and gathering system may be diagramed as follows:

Producing Well (the beginning): Well head installation--------> gathering system----------> tank batteries---------> pumping stations (storage site on pipeline)------> out the pipe to terminal (continuously moving 500000 to 1-1/2 millions bbls. of crude oil)----------> shipment to refiners and consumer (the end).

The order of construction of a gathering system is a series of interconnecting small inch pipelines proceeding from well-head installation---> Separator and/or treater installation---------> Heater installation------> Tankage (field storage)-----> then transport as per flow chart above.

In this report the pipeline construction is viewed as a total package which includes the pipe itself, the pumping stations, and the terminal sites. The feeder and gathering systems, including existing productive wells, are viewed as another entity separate and apart from the construction of the pipeline.

Skills which are considered to require minimum time for retraining or upgrading for pipeline construction work are:

cat operators
backhoe operators
oilers for ditchers
apprentices as oilers
warehousemen
bending machine operators
surveyors
bulldozer operators
burning equipment operators
wheel ditcher operators
ripper-tooth attachment operators
wrapper & coater operators

BIA has trained a number Alaskan Natives in surveyor skills, drafting skills, basic welding, and warehousing. Radio operators will also be in demand, as well as air and land traffic controllers. Residual skills in these areas are present in the unemployed and underemployed Alaskan work force.

The pipeline construction cycle is in peak swing from March through December. Down time runs normally from January through February and into March. The maximum number of spreads anticipated to be active at any one time during peak construction periods is 3 to 5. River crossing crews operate usually only during down time. There will probably be 3 river crossing crews active at any one time. These crews require 50 to 60 men. It is expected that 2 spreads may also be operant during down time.

Warehousing is one area of heavy manpower demand in oil related construction. Surveyors and draftsmen will be required in some quantity.

There are presently a few oil wells in existence which are capped because it was uneconomical to operate them without cheap pipeline transport. These can now be tapped and will require feeder hookup.

There will be need of small permanent maintenance crews at the pumping stations and well heads after feeder hookup is completed, but before the oil field becomes "Maintained." A prolonged period of construction adjustment to the pipeline after its completion is anticipated by the industry.

Terminal sites, at tidewater, will require all the usual service and maintenance labor of a functioning harbor, plus maintenance of the tank farms and peak periods of intensive labor demand to handle seasonal cargo. The Royal Canadian Air Force has found that it requires 20 tons of supplies to maintain one man through the arctic and subarctic winter. Terminal sites will require workers to maintain docking facilities, dredges, barges, feeding and housing of workers, recreational facilities, and routine clerical procedures.

To return to consideration of the proposed emergency training program, a special crash program for pipeline workers could place a number of men on the job IF the school were run for that purpose only, the instructors were top experts in their field, and throughly known in their field. Instructors are required in welding, operating engineers, transportation, and general pipeline construction skills. Administration of the actual program would require a specially qualified person who has both field and management experience in pipeline construction. A few such individuals are presently available in Alaska.

The object of the training would be to orient all trainees to pipeline construction and to provide such flexibility that each trainee would be able

to select that skill which interests him the most and provides the best means to advance proficiency. Entry into employment would be through the normal channels, but placement would be supported by the project.

By maintaining close communication between government, labor, and industry, it is anticipated that training will be guided by two controls:

--An expert projection by industry of skills demanded relative to present and anticipated industrial development and expansion in Alaska;

--Recruitment for skills re-training and up-grading will be conducted in cooperation with unions. As demand for craft and trade skills is expanded, quality control through approved instruction in the areas over which the unions hold jurisdiction would be maintained.

The most important resource in Alaska is its citizens. Therefore, any project undertaken must be viewed in the light of assisting industries to develop, and concurrently to assist the individuals involved to advance themselves to a level commensurate with their ability. The Department of Education is directly involved as industry requires trained personnel in order to be competitive in today's market. Training involved under Departmental control can be of several types: crash training programs to meet critical shortages of skilled personnel in certain areas, upgrading of unemployed, underemployed or jobless to meet industry's rising standards, upgrading of employed persons to enable them to cope with technological changes and thus stay employed, ongoing technician programs to meet the continuing needs of industry and professional training at the university level.

The prime purpose of the training project proposed is to place unemployed and underemployed Alaskans on pipeline construction oriented jobs, under a cooperative and consolidated arrangement. The aptitude of Alaskan Natives in mechanical ability and remarkable skills in these areas is commonly accepted to be true and supported by employers. Exploration and test crews on the North Slope have hired some Alaskan Natives and have publicly given high praise for their workmanship and abilities. A goal of this report is to provide a vehicle whereby many more Alaskan Native people may gain needed sophistication in specialized skills and to acquaint them with the circumstances and demands of working with a precisely coordinated construction crew.

Certain over-riding policies must guide any program which seeks to constructively alter existing manpower conditions. The project proposed, regardless of its duration or possible expansion and growth, will be limited by the following policies:

--The permanent utilization of the trainees in the best interests of the individuals, and human and economic resource development in Alaska;

--Planning which includes evolving conditions and experience of government, industry, and labor to foster plans for:

--Using this project as a model for further training programs,

--protection of wage earning capacities of the individual trainees, by

-anticipating and providing for re-training or cross-training into new career fields for obsolete or outmoded skills.

The program being discussed herein is not at the university level (except for the initial development of Alaskan industrial psychology), so comments will not be appropriate to professional level training.

Vocational education at any level must be in constant, continuing contact with industry. Only in this way can courses or programs be kept relevant to their needs and to new technological innovations. Thus, all courses in any skills training should have advisory boards comprised of representatives of industry, labor, and the technical institutions. Revisions may be made to courses which are based upon the advice of these boards, Other than for revisions, courses in technical training are fairly stable and intakes can be changed so that the labor market does not experience either extreme shortages or oversupply.

The oil industry in Alaska is not yet well organized, but in Canada it works cooperatively in training program development. They have formed four groups, through petroleum related associations; these being oil production, gas, pipeline, and drilling. These groups formed a training branch of their own which became autonomous in 1953, although it works closely and cooperatively with the Province supported education department. This training organization is called the Petroleum Industry Training Service (P.I.T.S.). The Department of Education works both with P.I.T.S. and the four supporting groups. Through the efforts of the petroleum industry, a permanent petroleum industry training center has been established in Alberta. To date, they have a "big-rig" sitting over a 3,000 foot hole, another hole 600 feet deep over which can be placed a "service rig", and temporary classrooms and shop area. These latter will be moved into the permenent building which should be completed in the fall of 1969 and is located within the city of Edmonton.

The Province of Alberta has signed an agreement with the manpower authority whereby the Province arranges training courses for adults and Manpower places adults into these courses and pays them their allowances. Part of the agreement also allows Manpower to pay for the cost of training and wage re-imbursement for companies having an in-service training program that has been approved by the Province. In addition, the Province has a complementary program whereby it can assist those people not acceptable to Manpower either in regular training programs or in the equivalent of American On-The-Job-Training contracts.

The Alberta Petroleum Industry Training Center is operated by the Division of Technical and Vocational Education, Department of Education, for courses at a level less than the usual two-year technician programs. It is involved in ongoing programs and crash programs as required. As is the custome, this is a cooperative project between industry and government. Industry lends specialized equipment and tools such as rigs, pumps, blowout preventers, power units, and so forth, as it would not be economical for the government to buy such equipment. Industry advises the Center of their manpower needs, the types of courses required, course content, and priority of courses. From this information, they devise and operate the necessary courses. P.I.T.S., however, is a private, non-profit corporation, which contracts its services to others, or accepts contracts to render services for others in keeping with the purposes of the organization.

Through the generosity of P.I.T.S. and various other organizations and governmental divisions, The College of Behavioral Sciences and Education,

University of Alaska, has on file for resource materials, a collection of course outlines, curriculum guidelines, and program descriptions pertaining to petroleum related skills training in Canada.

Two of the "crash" training programs which Alberta became involved in for the petroleum industry were a course for "big-inch" pipeline welders when the pipelines were first being laid in Alaberta, and again when "gas-shield" welding came into use in laying pipe. In these, industry supplied the welding equipment and top personnel as instructors, the school supplied instructors' wages, rod, space, training allowances, operating costs, and the manuafcturers supplied the pipe. This is approximately what is being suggested in relation to training Alaskans for the Alaskan pipeline construction, only incorporating more than just welding skills.

Following are some general bits of advice which resulted from correspondence with the Assistant Director of Vocational Education of the Province of Alberta. They are the result of more than 20 years accumulated experience in developing and directing petroleum related skills training. It would behoove Alaskans to weigh any projected planning carefully in the light of what others have learned in similar situations just past, particularly when the present training from which the experience resulted is considered successful by government, industry, and labor. The Assistant Director advises:

1. Involve industry: expertise, supply of instructors, supply of specialized equipment;

2. Involve labor: if unions are part of the labor scene, involve them from the start. Other experience indicates that with involvement you obtain their complete cooperation, but if involved after fait accompli, they become very suspicious of training programs;

3. Adults in training at lower than technician training must have a wage or training allowance. Adults will more readily accept a training allowance than a welfare payment;

4. Involve other government departments, e.g. Dozer Operator Training (Highway and Forestry), Drilling Regulations (Dept. of Mines and Minerals):

5. Involve universities: Dept. of Extension and those of graduate study, research, science, engineering, business management, and education:

6. Involve technical institutes;

7. In planning a total program "flexibility" is the key to proper utilization of manpower, space, equipment, supplies, etc., for example, as related to availability:

   --Instructors: universities, technical institutes, industry, vocational training centers;
   -Equipment: universities, technical institutes, industry, vocational centers
   --Space: Universities, technical institutes, industrial centers, vocational centers

Any or all of these components should be considered when planning a particular program so that the desired course is of optimal value.

8. If devising a series of courses on a short-term basis, try to initiate a system whereby credit can be obtained towards a recognized certificate or diploma even though the requirements may take an extended period of time to complete. (For example, a course can be developed whereby welders may take two courses per year for a period of approximately 6 years, and obtain a Technicians' diploma in welding.)

Up to now, in Alaska, welders have been taking many courses under various programs, but they are often not recognized beyond the particular project in which they were performed.

In conclusion, it appears at the present time that awareness for the accellerating demand for all categories of manpower in Alaska is being slowly recognized in different ways by a number of concerned parties. For any practical orderly approach to materialize that will be generally acceptable, it seems that government, industry, and the private sector, acting cooperatively through individual representatives, will have to take the lead in manpower resource development until the established educational and training procedures can gain momentum. Various special interests are attempting to conduct limited training programs to help fill their immediate labor needs. This operation is both excessively costly on a per trainee basis, and is so limited in the number of individuals it can produce, it will soon reach the point of diminishing returns. It additionally jeopardizes attempts at comprehensive methods of approaching the problem by placing portions of the total available funds in competition with each other, or more negatively, it dilutes or dissipates energies and finances which could be applied far more effectively. The only other present alternative, until publicly supported training programs are available, is for the industry and unions to conduct their own in-house training programs on a major scale. When the total manpower demand for petroleum related construction is matched against the number of workers being recruited by the individual contractors and oil companies, it is neither morally justificable or economically feasible to anticipate such an action, as follows. That would be for the industry and the unions to launch an immediate training and orientation program for Alaskans to provide what is, in Alaska, massive amount of entry-level employees for a monumental task that is subdivided into numerous areas of responsibility.

It is feasible however, for a contracting corporation, similar to P.I.T.S., to be supported for the public good and the general economy, by the chief agents concerned with the manpower demand--that is the oil companies, the contractors, labor, and government. This action can help fulfill an immediate and recognized high manpower demand, and at the same time gainfully employ a large percentage of the presently unemployed and underemployed residents of the State. Of great importance is that these individuals would be employed in an area of stable and growing demand, according to present understandings, and the action would insure full awareness by industry and the Alaskan labor force that Alaskan labor will be firmly and fully established in a rapidly expanding dynamic industrial complex offering jobs in almost limitless variety and progression all over the world.

ATTACHMENTS

#1 Comments regarding Labor

#2 Personnel Required for a Typical Pipeline Spread

#3 Typical North Slope Drilling Crew

#4 Graphic Timetable for North Slope Development and Production Construction

#5 Minimum Basic Staff or Training Program Proposed

COMMENTS REGARDING LABOR

ATTACHMENT #1

According to the U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS in a letter dated August 20, 1969:

> In the U.S., approximately 185,000 workers are employed in the petroleum refining industry and it is estimated that more than 80 percent are covered by collective bargaining agreements. About one-half of the organized workers are represented by the Oil, Chemical, and Atomic Workers (AFL-CIO), which generally represents all production and maintenance workers in a facility. The next largest group of organized workers is represented by affiliates of the National Federation of Independent Unions, made up of organizations usually limited to a single plant or company. In other instances, the various crafts are represented by the Boilermakers, International Brotherhood of Electrical Workers, Painters, Plumbers, Operating Engineers, Hod Carriers, Iron Workers, Carpenters, and Teamsters.
>
> Unions affiliated with the AFL-CIO receive their charters from the Federation and each specifies a jurisdiction, although at times unions expand beyond and across jurisdictional lines. In essence, it depends on which union does the organizing and what the bargaining unit is as determined by the National Labor Relations Board.

Unions normally resist any program which will provide employment or the means to enter employment which is generated outside their own training programs--or which reaches those outside their existing membership.

The pipeline contractors Association of America has a 3 year renewable agreement with the Internationals including the Hod Carriers, Pipefitters, Operating Engineers and Teamsters. At this level, training which leads to promotion of needed skills, advancement of union members, and highly skilled specialization under union jurisdiction is encouraged.

Union locals in Alaska may not yet be aware of the scope and coming demand for workers who are now, and who will be needed, in the crafts areas over which they hold jurisdiction. There are several priority demand skills in the petroleum industry which are not now available through the locals. Preliminary inquiry has not disclosed any existing means of training sufficient numbers in these highly specialized skills demanded by pipeline construction contractors. Thus, industry is led to the conclusion that importation of labor, in an area of remarkably high unemployment, is the only means of obtaining what must be had to meed manpower demands.

Specific examples are the welding and heavy equipment operation specialty skills. Big pipe welding, and quarter million dollar prototype machines for ditching are unfamiliar to Alaskan workers. Alaska does have, however, a fairly large, but undetermined number of both Union and non-Union workers holding varying degrees of skill in these general areas. Industry opinion indicates that a re-training or up-grading of skills into specific proficiencies must occur before Alaskan workers in the general skills categories can be placed in any real number in petroleum industry related jobs.

LOCAL CONTROVERSY EXISTS ON THIS POINT!

Nevertheless, it seems to be generally agreed that if available workers were

to hold proof of proficiency acquired under instructors certified by the industry and/or unions, those men would be acceptable by industry and their contractors. Furthermore, industry spokesmen frequently state emphatically that they would prefer a permanent local workforce to provide the manpower from the development through the maintenance of the oil fields as well as any refining or processing being done in Alaska.

Notice should also be made of the anticipated greatly increased demand for Longshoreman skills. Research by the writer presently under way is intended to determine the extent and categorization of the need and to relate this to manpower resources in Alaska. Present status of the study indicates this to be a fertile area of seasonal intensity which can be constructively approached through a basic orientation and certification program for deckhands and cargo handlers.

ATTACHMENT # 2

PERSONNEL REQUIRED*
for
TYPICAL PIPELINE SPREAD

Occupational Titles and Code Numbers are from the Dictionary of Occupational Titles and Classifications, Volumes I and II, Third Edition, Published by the U. S. Department of Labor.

No. Req'd	Code	Classifications
	(850.883	Bulldozer Operator
	("	Motor Grader Operator
	("	Ripper Operator
	("	Loader Operator
52	("	Boom Operator
	("	Tow Cat Operator
	("	Back Hoe Operator
	("	Crane Operator
	("	Ditching Machine Operator
	(	
	(859.883	Dragline Operator
	(862.782	Clean-Prine & Wrap Machine Operator
	(850.782	Horizontal Bore Machine Operator
2	850.887	Bore Machine Helper
15	892.883	Labor, Hoisting
30	"	Swamper (Helper)
20	"	Oiler
10		Hooker
6	902.883	Truck Driver - Dump
20	904.883	Truck Driver - Trailer
17	906.883	Truck Driver - Light
3	859.281	Blaster (Powder Man)
6	859.887	Blaster (Helper)
6	620.281	Mechanic, (Construction Equipment)
10	620.884	Mechanic, (Helper)
4	859.887	Air-Hammer Operator
70	810.782	Welder, Arc
3	819.381	Welder, Fitter (Lay Out)
5	812.884	Welder, Combination (Arc & Gas)
78	862.887	Welder, Helper
1	862.887	Clamp Man
1	862.884	Stabber
2	862.884	Spacer

No. Req'd	Code	Classification
30	862.887	Laborer
2	202.388	Clerk - General
1	223.388	Clerk - Material
1	201.368	Secretary
1	223.387	Warehouse Man
1	869.133	Foreman, R.O.W.
1	869.133	Foreman, Clean-Up
1	850.137	Foreman, Ditch
1	310.131	Foreman, Weld
1	899.131	Foreman, Bend
1	899.131	Foreman, Lower-In
1	899.131	Foreman, Tie-In
1	899.131	Foreman, Water Crossing
1	850.137	Foreman, Back Fill
1	850.137	Foreman, Labor
4	819.381	Inspector, Weld
1	862.287	Inspector, Coating
1	862.687	Inspector, Holiday-Detector Operator
5	869.387	Inspector, Pipeline Construction
		CATERING SERVICE PERSONNEL
11	315.381	Cook, Camp
17	318.887	Kitchen Helper
14	(329.887	Camp Attendant
	("	Bull Cook
	("	Choreman
	("	Bed Maker
1	330.371	Barber
3	354.878	First-Aid Attendant
2	361.885	Washer, Machine (Laundry)
4	372.868	Watchman
2	372.368	Flagman
2	952.782	Auxiliary-Equipment Operator
473	TOTAL MANPOWER PER SPREAD	

* Information received courtesy of the Alaska Department of Education, Division of Vocational Education.

ATTACHMENT # 3

TYPICAL NORTH SLOPE DRILLING CREW
(Alaska)

According to Nabors Drilling Company, August 1969:

Workers are employed on 2 shifts, with a third full crew which acts as a swing shift when another crew is relieved. It is a 24-hour, 7-day a week operation.

In order of proficiency demanded:

RIGMEN

3	Drillers	
3	Derrickmen	
3	Motormen	
3	Mechanics (occasionally only 2 are assigned to a rig)	
3	Lead Tong men	Roughnecks
3	Backup Tong men	Roughnecks
4	Roustabouts	

SUPERVISION

3	Toolpushers (occasionally only 2 are assigned to a rig)
1	Engineer or engineering technician (usually an oil company employee)

SUPPORT SERVICES

3	Cooks
3	Cook's Helpers
3	Bull Cooks
3	Water haulers (occasionally only 2 are assigned to a rig)

36 to 38 workers TOTAL

Minimum-entry jobs available per rig may run 5 to 6 positions. These openings will be found in the following categories:

Roughnecks
Roustabouts
Bull Cooks
Water haulers

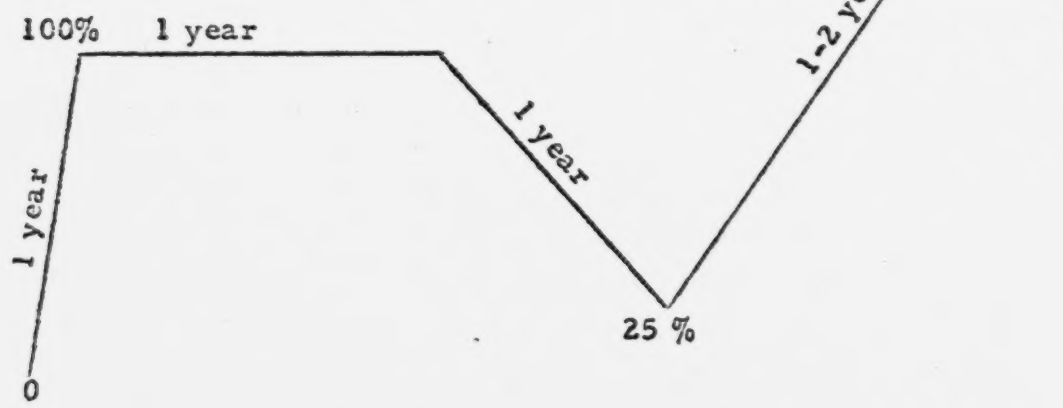
ATTACHMENT # 4

GRAPHIC TIMETABLE FOR NORTH SLOPE DEVELOPMENT AND PRODUCTION CONSTRUCTION

(Based upon expert and experienced opinion)

15-YEAR PROJECTION

This graph demonstrates the work force necessary to install the large diameter pipeline and the development of the North Slope oil reservoir. The total number of workers necessary for the construction of the 40-48" pipeline is shown as 100%. (Approximately 3500 to 5000 plus a support force at 3:1.) The construction period will last for about 2 years. When the big pipe is welded out and the front-end crews are phased out, the labor demand will drop off sharply over the next 12-month period until it reaches the lowest point of about 25% of the initial force. At this time the construction of an extensive feeding and gathering system will gain rapid momentum. It requires about 10 miles of small pipe for every mile of large pipe laid, and includes a sub-network of pumping stations, tank storage, and other specialized requirements. When this phase reaches plateau of labor demand, it is reasonable to expect the labor force will be 200%, or double the numbers demanded at the peak employment period of the big pipeline construction.



This requires a stable skilled and semi-skilled workforce. The minimum period for development construction is expected to be 10 years. The actual length beyond this will be determined by the extent of the reservoir. With foresight and planning, this work force could become almost entirely indigenous labor force from the beginning. (See narrative on Canadian experience.)

ATTACHMENT # 5

MINIMUM BASIC STAFF FOR TRAINING PROGRAM PROPOSED

EXECUTIVE DIRECTOR: Must be an individual of proven ability and responsibility, mature, thoroughly knowledgeable about Alaskan affairs, openly committed to the equal employment opportunity philosophy as stated in the Governor's Code of Fair Practices, experienced in the pipeline construction field, and able to demonstrate ability to do the job and work with a variety of people.

ADMINISTRATIVE ASSISTANT: Must be a person of good standing in the community, have demonstrated through past experience the capability to adapt to the demands of the program, and have clerical skills and experience sufficient for all record keeping, accounting and correspondence as my be delegated by the Director.

PRIMARY INSTRUCTORS: (4) Must be men who are recoganized and acknowledged experts in their trade, who are well-known in pipeline construction, familiar with union policy, and of mature and responsible character. There will be one instruction from each jurisdictional area of:

Plumbers & Steamfitters
Teamsters
Operating Engineers
Hod Carriers

SPECIAL INSTRUCTORS: (by arragnement as needed) Representatives of manufacturers and industry, local medical personnel or industry medical technicians, specialists in Arctic Survival, and university faculty.

CONSULTANTS: (May require 2, depending upon needs) 1. Special assistance: recruitment of instructors, and available to assist implementation of program. Must have intimate knowledge of industry and construction and the ability to produce the uniquely qualified primary instructors. 2. Program Consultant: provides technical assistance and liaison services to authorizing body and program administration and execution. Will be responsible for documentation and subsequent evaluative report of project. Must have intimate knowledge of project from its inception, and be in good standing with the University of Alaska.

CLERICAL SUPPORT STAFF: As needed.

NOTE: It will require at least 2 weeks lead time to make inquiries of instructors. Since the success of the program--in fact the basic premise regarding its soundness--rests upon the reputation and qualifications of the primary instructors, instructor commitment should be obtained before other elements of the program are mobilized.

SPEECH TEXT
presented
BEFORE THE 20th ALASKA SCIENCE CONFERENCE AUGUST 1969

SPECIAL PAPERS--August 26

by

Laurel LeMieux Bland
Research Assistant in Adult Education
University of Alaska

Adult Basic Education Needs Assessment for the State of Alaska

An Outline Proposal and BAckground Report for a Special Program in Petroleum Related Skills Training for Fairbanks Area

Annotated Foundation for a Bibliography for Adult Basic Education and Human Resource Development in Alaska--1969

Two days ago I returned from out of town to learn that I was scheduled to report on three studies this evening, according to a preliminary agenda found in my mail. Only yesterday I found that I was listed to report on one paper specifically, according to the Conference program. After listening to the presentations of the past two days and discussing my presentation with my advisors, it has been decided that it will best serve the purposes and interests of this Conference to present a report combining all three studies. It seems most appropriate to describe briefly the two papers which are primarily research resource materials, and give to you tonight some of my findings and conclusions in detail regarding petroleum development and how it relates to Alaskan employment.

The annotated bibliography, which runs approximately 150 pages in length, was developed in the usual course of locating pertinent literature regarding my research projects. As the collection of references grew, I found that I had amassed a large volume of annotated research and resource materials concerning Alaska which had not previously been listed and related to each other in a similar manner. There are about 650 entries, with approximately 500 of those dealing specifically with Alaska. Furthermore, a number of the listings were largely unrecorded on any available reading list. Since all the materials are believed to have application in human resource development and adult education in Alaska, the University of Alaska issued 100 copies through the College of Behavioral Sciences and Education. These were distributed upon receipt of request within two weeks, so by the end of May all copies were gone.

The Adult Basic Education Needs Assessment for the State of Alaska contains data based upon 1967 population figures compiled by the Federal Field Committee for Development Planning in Alaska and the U.S. Public Health Service. Statistical data is recorded on 17 tables and 7 maps which list by location the principal concentrations of population

elgible for adult basic education by communities of 100 or more persons. The study is best reported by a synopsis of the findings, conclusions, and recommendations.

The report on petroleum related skills and employment needs, which I shall read, has necessarily been abbreviated. Since knowledge and experience concerning training and educational projects is generally held by this audience, I shall not describe the suggested curriculum, staffing, or finances of the recommended project. Hopefully, I shall present, in a different relationship some aspects of petroleum development impact in Alaska as it concerns the often overlooked, but deeply affected human factor in "Change in the North", the so-called "ordinary working man," particularly the Alaskan Eskimo, Indian, or Aleut who seeks a worthwhile job on petroleum realted construction projects.

As stated earlier this evening, those of you who wish to make use of these studies being reported herein may obtain the full report by request, using the form in your packets from the Conference, from the Institute of Social, Economic, and Government Research, University of Alaska.

V

SUMMARY and CONCLUSIONS

The purpose of this study was to portray the needs for Adult Basic Education in Alaska as accurately and realistically as possible. After an exhaustive review of the literature pertaining to all forms of Adult Education in Alaska, it was considered most urgent to assess the State's needs for Adult Basic Education in those areas which presently have no meaningful Adult Basic Education programs in effect.

None of the literature provided evidence to indicate any appreciable number of non-Native adults in the State who are eligible for Adult Basic Education. It is indicated that where those few individuals do appear, they are confined almost exclusively to those areas of population concentration which can provide Adult Basic Education through existing facilities. There are some foreign-born individuals who wish to become naturalized citizens and thus need a certain kind of basic education. Very few, if any, of these persons will be located where they cannot attend classes designed to meet their needs. It is presumed, moreover, that such persons will have obtained a basic education in their place of birth, placing them in a different educational frame of reference from the population being considered by this study.

State regulations describe Adult Basic Education as a "... program to assist adults in improving their academic skills so that they might better compete for jobs and take a more active part in the business of their communities."[1]

Adult Basic Education has both immediate and long range goals.

1. Cooperative Area Manpower Program System (Alaska), Guide to Human Resource Development Programs, page 3.

It seeks to improve an individual's economic and social condition, and to progressively improve the economic, social, and general welfare of the whole population. Academic retardation, early school dropout, poor health and sanitation, and over 60% unemployment in some areas, have characterized Native Alaskan life styles for over 100 years.[1] There is some recent improvement in educational achievement levels noted in the literature, but it is still very limited. This is substantiated by a quick comparison of current enrollment figures for Bureau of Indian Affairs and State Rural Schools and the subsequent grade achievement by grade enrollment of students. There is a steadily diminishing total enrollment with each subsequent year as any graded group is followed over a five year period. (See Tables following Chapter IV.)

Based upon the evidence in this study, it is concluded that:

1. The Alaskan population which is in most need of basic education programs, (based upon achievement levels) is located North, East, and West of Fairbanks.

2. Adult Basic Education needs are confined almost exclusively to the Alaskan Native population.

3. There is sufficient felt need and motivation among the target population to call upon the State to provide Adult Basic Education for those who are eligible.

4. The need for Adult Basic Education is critical and wide-spread, with nearly 92% of the Alaskan Native adults eligible for such education.

5. It is in the best interests of the State and the Nation to move to inaugurate Adult Basic Education programs which will reach the eligible population.

1. Federal Field Committee, Alaska Natives and the Land, context.

In accordance with the Alaska State Plan for Adult Basic Education:[1]

SECTION 1.6 PROGRAM,

1.61a:Policies:

Programs of Adult Basic Education will, to the extent possible, be developed in the geographical regions of the State where the highest percentage of adults live who have not completed grade eight. The primary concern will be with educating those adults whose educational level is grade five and below. Priority will be given to programs which provide for instruction in speaking, reading, or writing the English language. A secondary consideration will be given to the group whose academic achievement skills are above grade five, but below grade nine. At all levels it will be the policy of this program to concentrate on the basic educational skills.

Thus, priority levels were determined for the three divisions which evolved during this study, within the population eligible for Adult Basic Education:

First Priority	those who have completed less than 6, 6 years of schooling;
Second Priority	those who have completed more than 6, but less than 8 years of schooling;
Eligible	those who have completed more than 8 years of schooling, but who are 2 to 5 or more years academically retarded, but whose achievement level is unknown.

1. Alaska, Department of Education, State Plan for Adult Basic Education, page 3.

An extensive survey of the pertinent literature and existent statistical data provides ample evidence to conclude that the needs for Adult Basic Education in Alaska are concentrated almost exclusively within the Alaskan Native population.

An analysis and interpretation of statistical data has produced information about the number and location of Alaskan Native adults eligible for basic education according to the present Federal and State regulations.

Results of this study are given by five major geographic regions, and these are subsequently subdivided by twenty-two of the twenty-four Census Districts (four Districts are combined into double units). The principal centers of Native population (100 persons or more) are listed for each region.

The total number of adults found eligible for basic education is shown below. Further refinement of population totals will be found on pages

In accordance with the State Plan for Adult Basic Education, the priority status of the eligible population is:

		1st Priority	2nd Priority	Eligible	Area Totals
I	Southeast	2234	1747	118	4099
II	Southcentral	3804	2972	190	6966
III	Southwest	3106	2425	116	5697
IV	Northern	1694	1334	90	3118
V	Northwest	2901	2264	156	5321
STATE TOTALS:		13,739	10,742	720	25,201

VI

RECOMMENDATIONS

The greatest number of adults in Alaska who are eligible for Adult Basic Education are located in rural, and often isolated, areas. It is axiomatic that such individuals cannot attend instruction in the urban centers for obvious and practical reasons. Other adults eligible for Adult Basic Education are located in urban areas which offer, or have the facility to offer, Adult Basic Education through existing municipal education systems.

Based upon the foregoing, to insure a uniform qualitative approach to Adult Basic Education in Alaska, it is recommended that:

1. The State encourage urban areas to assess local needs for Adult Basic Education, and that the State extend all possible support to the establishment of programs which will satisfy those needs.

2. That the State extend all possible support to an appropriate agency or institution which, by mutual agreement, shall undertake to develop a central repository for research and other pertinent materials required for research resources in educational planning for adults.

3. Program planning be undertaken at once to join the resources of Federal, State, and other agencies in the development of a comprehensive coordinated program which can provide immediate and long-range guidance to Adult Basic Education, in addition to the State Plan for Adult Basic Education.

4. Particular attention be directed to the development of innovative programs which begin with thoughtful preliminary planning with village-level Native Alaskan leadership and experienced consultants in Alaskan Education and Community Development.

5. Greater effort should be directed toward coordination and increased multi-directional communication among individuals and agencies concerned with Adult Education in Alaska. The coordinating agency which is concerned with planning and programming recommendations, in cooperation with institutions of higher and continuing education, should develop comprehensive planning based upon the Needs Assessment and action research in functioning programs.

ERIC Clearinghouse
JAN 13 1970
on Adult Education